

**IN THE SPECIFICATION:**

Please replace the paragraph running from page 1, line 8, to page 3, line 5, of the specification with the following:

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The present document contains subject matter related to that disclosed in commonly owned, co-pending application Serial No. 09/209,460 filed May 14, 1998, entitled ULTRA WIDE BANDWIDTH SPREAD-SPECTRUM COMMUNICATIONS SYSTEM (Attorney Docket No. 10188-0001-8); Serial No. 09/633,815, filed August 7, 2000 entitled ELECTRICALLY SMALL PLANAR UWB ANTENNA (Attorney Docket 10188-0005-8); Application Serial No. 09/563,292, filed May 3, 2000 entitled PLANAR UWB ANTENNA WITH INTEGRATED TRANSMITTER AND RECEIVER CIRCUITS (Attorney Docket 10188-0006-8); Application Serial No. 60/207,225 filed May 26, 2000, entitled ULTRA WIDE BANDWIDTH COMMUNICATIONS SYSTEM AND METHOD (Attorney Docket No. 192408US8PROV); Application Serial No. ~~XX/XXX,XXX~~ 09/685,198, filed October 10, 2000, entitled ANALOG SIGNAL SEPARATOR FOR UWB VERSUS NARROWBAND SIGNALS (Attorney Docket 192504US8); Application Serial No. ~~XX/XXX,XXX~~ 60/238,466, filed October 10, 2000, entitled ULTRA WIDE BANDWIDTH NOISE CANCELLATION MECHANISM AND METHOD (Attorney Docket 193517US8); Application Serial No. 60/217,099 filed July 10, 2000 entitled MULTIMEDIA WIRELESS PERSONAL AREA SYSTEM NETWORK (WPAN) PHYSICAL LAYER SYSTEM AND METHOD Attorney Docket 194308US8PROV); Application Serial No. ~~XX/XXX,XXX~~ 09/685,203, filed October 10, 2000, entitled SYSTEM AND METHOD FOR BASEBAND REMOVAL OF NARROWBAND INTERFERENCE IN ULTRA WIDEBAND SIGNALS (Attorney Docket 194381US8); Application Serial No. ~~XX/XXX,XXX~~ 09/685,197, filed October 10, 2000, entitled MODE

CONTROLLER FOR SIGNAL ACQUISITION AND TRACKING IN AN ULTRA  
WIDEBAND COMMUNICATION SYSTEM (Attorney Docket 194588US8); Application Serial  
No. ~~XX/XXX,XXX~~ 09/684,400, filed October 10, 2000, entitled ULTRA WIDEBAND  
COMMUNICATION SYSTEM WITH LOW NOISE PULSE FORMATION (Attorney Docket  
195268US8); Application Serial No. ~~XX/XXX,XXX~~ 09/685,195, filed October 10, 2000,  
entitled ULTRA WIDE BANDWIDTH SYSTEM AND METHOD FOR FAST  
SYNCHRONIZATION (Attorney Docket 195269US8); Application Serial No. ~~XX/XXX,XXX~~  
09/684,401, filed October 10, 2000, entitled ULTRA WIDE BANDWIDTH SYSTEM AND  
METHOD FOR FAST SYNCHRONIZATION USING SUB CODE SPINS (Attorney Docket  
195272US8); Application Serial No. ~~XX/XXX,XXX~~ 09/685,196, filed October 10, 2000,  
entitled ULTRA WIDE BANDWIDTH SYSTEM AND METHOD FOR FAST  
SYNCHRONIZATION USING MULTIPLE DETECTION ARMS (Attorney Docket  
195273US8); Application Serial No. ~~XX/XXX,XXX~~ 09/685,199, filed October 10, 2000,  
entitled A LOW POWER, HIGH RESOLUTION TIMING GENERATOR FOR ULTRA-WIDE  
BANDWIDTH COMMUNICATIONS SSYSTEMS (Attorney Docket 195670US8); Application  
Serial No. ~~XX/XXX,XXX~~ 09/685,202, filed October 10, 2000, entitled METHOD AND  
SYSTEM FOR ENABLING DEVICE FUNCTIONS BASED ON DISTANCE FORMANCE  
(Attorney Docket 195671US8); and Application Serial No. ~~XX/XXX,XXX~~ 09/685,201, filed  
October 10, 2000, entitled CARRIERLESS ULTRA WIDEBAND WIRELESS SIGNALS FOR  
CONVEYING APPLICATION DATA (Attorney Docket 196108US8); Application Serial No.  
~~XX/XXX,XXX~~ 09/685,205, filed October 10, 2000 entitled SYSTEM AND METHOD FOR  
GENERATOR ULTRA WIDEBAND PULSES (Attorney Docket 197023US8); and Application  
Serial No. ~~XX/XXX,XXX~~ 09/685,200, filed October 10, 2000, entitled LEAKAGE NULLING

*Al Cont.* RECEIVER CORRELATOR STRUCTURE AND METHOD FOR ULTRA WIDE  
BANDWIDTH COMMUNICATION-S SYSTEM (Attorney Docket 1541.1001/GMG), the

entire contents of each of which being incorporated herein by reference

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*1*  
Please replace the paragraph running from page 33, line 21, to page 34, line 5, of the specification with the following:

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*AJ*  
By changing the circuitry of the de-jam code generator 704 and the wavelet generator 707, many different encoding and modulation schemes may be received, such as those described in co-pending application Serial No. ~~XX/XXX,XXX~~ 09/685,205, entitled SYSTEM AND METHOD FOR GENERATING ULTRA WIDEBAND PULSES (Attorney docket number 197023US). For example, the received UWB wavelets coupled to the antenna 700 may, for example, be bi-phase wavelets, multi-level bi-phase wavelets, quad-phase wavelets, multi-level quad-phase wavelets, or other shapes used to encode a NRZ data source at the transmitter. Decoding is achieved by providing the de-jam code generator with the transmit code used by the transmitter to generate two signals that are mixed with the received signals via a two-stage mixing approach.

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*1*  
Please replace the paragraph on page 34, lines 6-19, of the specification with the following:

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*A3*  
As described in the context of Figures 4 and 5, the receiver can avoid self-jamming by mixing the received waveform with a waveform having different characteristics than the signal being looked for. As shown in Figure 6B, the de-jam code generator generates two codes A, B that are mixed with the received signal at the first mixer 705 and the second mixer 708,

AB  
Cont.

respectively. Signal B is used to shape the wavelets corresponding to the wavelet shaping scheme used by the transmitter. Wavelet shaping schemes are described in co-pending application Serial No. ~~XX/XXX,XXX~~ 09/685,205, entitled SYSTEM AND METHOD FOR GENERATING ULTRA WIDEBAND PULSES (Attorney docket number 197023US). The output generated by the wavelet generator 707 (signal D) is mixed with the received signal at mixer 708. Unlike signal C produced by the wavelet generator in Figure 6A, the two signals that are mixed with the received signal in Figure 6B (i.e., A and D) are different than the signal being looked for. Signals A and D that are mixed with the received signal have properties such that if A and D were mixed together, the resultant waveform would be the same as signal C generated by the wavelet generator in the single mixer scheme of Figure 6A.

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